Building intelligent systems one e-citizen at a time

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Abstract:
The article comprises two sections. In the first, the author suggests that speculative markets are a neglected way to help Us find out what people know. Such markets pool the information that is known to diverse individuals into a common resource, and have many advantages over standard institutions for information aggregation, such as news media, peer review, trials, and opinion polls. Speculative markets are decentralized and relatively egalitarian, and can offer direct, concise, timely, and precise estimates in answer to questions we pose. In the second section, the author argues that now is the time for computer science and cognitive science to have their big science-one that harvests informal knowledge from a large number of e-citizens for building useful software for next generation systems. Given the conjunction of several forces-the need for natural human-machine interfaces and improved Web searching, the existence of good learning algorithms and Web infrastructure, and the demonstrated success of the Open Source methodology-the time is right for the Open Mind Initiative.

Index Terms:
information retrieval knowledge based systems Internet technological forecasting intelligent systems e-citizen speculative markets common resource information aggregation precise estimates computer science cognitive science informal knowledge next generation systems natural human-machine interfaces Web searching learning algorithms Web infrastructure Open Source methodology Open Mind Initiative